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| APPLICATION NO | . FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------|-------------------------------------|-------------------------|---------------------|------------------|
| 09/412,792 | 10/05/1999 | JAY H. CONNELLY | 10559/055001 | 1113 |
| 8791 | 7590 02/25/2005 | | EXAM | INER |
| | Y SOKOLOFF TAYLO SHIRE BOULEVARD | DEMICCO, MATTHEW R | | |
| SEVENTH | | | ART UNIT | PAPER NUMBER |
| LOS ANGELES, CA 90025-1030 | | | 2611 | |
| | | DATE MAILED: 02/25/2005 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--|---|-----------------------------|--|--|--|--|
| Office Anti-us Commence | 09/412,792 | CONNELLY, JAY H. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Matthew R Demicco | 2611 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 24 Oc | Responsive to communication(s) filed on <u>24 October 2004</u> . | | | | | |
| 2a) This action is FINAL . 2b) ⊠ This | This action is FINAL. 2b)⊠ This action is non-final. | | | | | |
| ,— | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 33 O.G. 213. | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1,3-15 and 18-30</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1, 3-15 and 18-30</u> is/are rejected. | | | | | | |
| | 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | | | | |
| Notice of References Cited (PTO-692) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Da | ate | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 5) Notice of Informal F 6) Other: . | atent Application (PTO-152) | | | | |
| S. Patent and Trademark Office | | | | | | |

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DETAILED ACTION

Response to Amendment

1. This action is responsive to a Request for Continued Examination, filed 10/25/04. Claims 1, 3-15 and 18-30 are pending. Claims 1, 10, 14, 18, 22 and 25-26 are amended. Claims 2 and 16-17 are canceled.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 10, 14, 18, 22 and 26 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1, 3-7, 9-15 and 18-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,018,768 to Ullman et al. in view of U.S. Patent No. 6,268,849 to Boyer et al.

Regarding Claim 1, Ullman discloses a method of broadcasting data, comprising sending information to a receiver (Col. 9, Lines 36-42) that includes a scheduled time (Col. 5, Lines 5-10) and a URL. As is well known in the art, a URL is a reference to a particular resource and typically includes a protocol specification (HTTP), host address and a resource including a filename (e.g.: index.html). A web browser application

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receives the web pages specified by the URL (Col. 7, Lines 31-53) and displays the data in synchronization with video content. The filename specification in the URL reads on the claimed information identifying an encoding format (See Figure 7, HTML, JPG, etc.), wherein the encoding format comprises a content format used to encode the data prior to broadcasting and apart from encoding the broadcast for transmission through a transport medium. Further, Ullman contemplates that the web page content may be carried on the same channel as the video programming (Col. 9, Lines 45-49). Therefore, the data must be broadcast at the scheduled time on the video-programming channel according to the schedule. What is not disclosed, however, is selecting one viewer application, capable of processing a broadcast of data in the encoding format at the scheduled time, from a plurality of viewer applications.

Boyer discloses a television program guide method (See Figure 9) wherein realtime data such as video and audio clips may be embedded within the television program
listings (Col. 4, Lines 44-54). Further, web content from the Internet may be transmitted
(Col. 5, Lines 1-11). A web browser is operable to receive the multimedia content such as
video and audio and play them back using a plug-in application such as Quicktime or
ActiveMovie (Col. 6, Lines 1-22). This reads on the claimed selecting one viewer
application capable of processing the broadcast data in the encoding format at the
scheduled time from a plurality of viewer applications. Boyer is evidence that ordinary
workers in the art would appreciate the ability to use web browser plug-ins to support
additional content formats in an interactive television method. Therefore, it would have
been obvious to one having ordinary skill in the art at the time the invention was made to
modify the method of Ullman with the plug-ins of Boyer in order to provide modular

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add-on support for a plurality of different content formats to further enhance the user's viewing experience.

Regarding Claim 3, Ullman in view of Boyer disclose a method as stated above in Claim 1. Further, as stated above, the URL of Ullman discloses a host that provides the data content (e.g.: www.lowell.edu, See Figure 7). This host reads on the claimed sent information identifying a content provider for the data.

Regarding Claim 4, Ullman in view of Boyer disclose a method as stated above in Claim 3. Further, as stated above, the URL of Ullman discloses a protocol to use to retrieve data (e.g.: http, see Figure 7). This protocol specification reads on the claimed identification of a channel for broadcasting the data. Further, Ullman discloses that a tuner retrieves the data on a channel (Col. 9, Lines 45-49). It is inherent that the broadcast transmits the data in the identified channel in order for the receiver to properly receive it.

Regarding Claim 5, Ullman in view of Boyer disclose a method as stated above in Claim 4. Ullman further discloses that the transmission medium may be analog or digital formats via satellite, cable, television broadcast, etc. (Col. 4, Lines 50-54). This reads on the claimed identified channel comprising a cable channel or wireless channel.

Regarding Claim 6, Ullman in view of Boyer disclose a method as stated above in Claim 1. Boyer further discloses a viewer application such as a Quicktime plug-in that is used to play back the data. It is inherent that such a plug in decodes the received data.

Regarding Claim 7, Ullman in view of Boyer disclose a method as stated above in Claim 1. Ullman further discloses that the information may be transmitted to the subscriber prior to initiation (Col. 5, Lines 3-7). This reads on the claimed broadcasting starting a predetermined time after the sending of the information. The time is

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predetermined based on the time stamp which indicates to the subscriber station when, during the program, to display the data (Col. 5, Lines 7-10).

Regarding Claim 9, Ullman in view of Boyer disclose a method as stated above in Claim 1. Ullman discloses sending a plurality of URLs to the subscriber with different file types (.HTML, .JPG, etc. -- See Figure 7). This reads on the claimed sending of a second information about a second scheduled time and content format for a broadcast of new data, the second content format being indicative of a new viewer application (Plug-in of Boyer) for processing the new data and then broadcasting the new data during the second scheduled time.

Regarding Claim 10, see Claim 1 above. The digital cable box of Ullman receives scheduling information (URLs with timing information) for data broadcasts and information to identify an encoding format as stated above. The encoding format identifies a particular viewing application (plug-in of Boyer) selected from a plurality of viewer applications to process the data broadcasts as stated above. The encoding format comprises a content format used to encode the data prior to broadcasting and apart from encoding the broadcast for transmission through a transport medium as stated above. The data is received from the broadcast at the schedule time and processed by the plug-in for playback.

Regarding Claim 11, see Claim 4 above.

Regarding Claim 12, see Claim 3 above.

Regarding Claim 13, see Claim 6 above.

Regarding Claim 14, see Claim 1 above. The digital cable box of Ullman receives scheduling information that provides broadcast times for data broadcasts and information

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for identifying an encoding format as stated above. Boyer discloses a plug-in application selected from a plurality of viewer applications for processing the broadcasts as stated above. The encoding format comprises a content format used to encode the data prior to broadcasting and apart from encoding the broadcast for transmission through a transport medium as stated above. Boyer further discloses that real-time data is embedded within the television program listings of corresponding televised events in progress (See Figure 9 and Col. 4, Lines 48-67). It is inherent that in such a graphical user interface, data must be stored in a memory. This reads on the claimed writing the scheduling information to a scheduling table having entries indexed by scheduled broadcast times and channels (See Figure 9).

Regarding Claim 15, Ullman in view of Boyer disclose a method as stated above in Claim 14. Boyer further discloses selecting a viewer application to processes the received data as stated above. Because the data indicates an encoding format that is used to select an appropriate decoder and the data is stored in memory as stated above, this reads on the claimed selecting based on information in the scheduling table.

Regarding Claim 18, see Claim 1 above. Ullman further discloses an interface to receive broadcasts of data (See Figures 7 and 8). Boyer discloses a plurality of viewer applications to decode the received data as stated above. Ullman discloses a data storage device (memory) for storing the client software (Col. 9, Lines 43-45). In combination with the plug-in applications of Boyer, this reads on the claimed data storage device storing a plurality of viewer applications to decode the received data. Further it is inherent that the PC or digital cable box that runs software applications would have a processor coupled to the data storage device for selecting and executing the appropriate

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plug-in application based on scheduling information and the encoding format as stated above. Ullman discloses such a processor (Col. 5, Lines 31-33).

Regarding Claim 19, Ullman in view of Boyer disclose a system as stated above in Claim 18. Ullman discloses a memory for storing client software as stated above. This reads on the claimed data storage device storing an executable control application. As stated above, new scheduling information is received prior to a program (Col. 5, Lines 3-10). It is implicit that for each program or data associated with a specific time in a program, that there be a URL transmitted, received and stored. This reads on the claimed updating a scheduling table (See Figure 7) in response to receiving new scheduling information for a broadcast of data.

Regarding Claim 20, Ullman in view of Boyer disclose a system as stated above in Claim 19. As stated above, the scheduling table (See Figure 7) contains URLs. The URLs contain a file type specification (e.g.: .HTML, .JPG, etc.). Boyer discloses that a plug-in in used to decode specific types of data. Therefore, it is implicit that the web browser select the appropriate plug-in to decode the appropriate content formatted data. This reads on the claimed control application selecting the viewer application to decode data based on information from the scheduling table.

Regarding Claim 21, Ullman in view of Boyer disclose a system as stated above in Claim 19. What is not disclosed, however, is that the control application selects the viewer application based on availability data for the viewer application stored in a viewer application selection table. Official Notice is hereby taken that it is well known in the art that a web browser stores information regarding what plug-ins are installed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention

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was made to modify the system of Ullman in view of Boyer with the software installation information of the well-known prior art in order for the web browser to know what types of data it can handle and what types of data it cannot. This reads on the claimed availability data for the viewer applications stored in a viewer application selection table.

Regarding Claim 22, see Claim 1 above. Ullman further discloses a URL encoder (See Figure 5, 8) for embedding URLs within a video program (Col. 4, Lines 59-62). The encoder reads on the claimed data storage device encoding computer executable instructions.

Regarding Claim 23, see Claim 3 above.

Regarding Claim 24, see Claim 7 above.

Regarding Claim 25, see Claim 9 above.

Regarding Claim 26, see Claims 1 and 18 above. Ullman further discloses client software stored in memory that causes a computer to perform the tasks as stated above.

Regarding Claim 27, see Claim 4 above.

Regarding Claim 28, see Claim 6 above.

Regarding Claim 29, Ullman in view of Boyer disclose a system as stated above in Claim 26. Ullman further discloses writing the scheduling information to a scheduling table having entries indexed by scheduled broadcast times (See Figure 7) as stated above. As stated above, the computer selects a viewer application based on data from the scheduling table, in this case, the content format identifier (e.g.: .HTML, .JPG, etc.) as specified by the URL.

Regarding Claim 30, see Claim 21 above.

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5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ullman et al. in view of the Advanced Television Enhancement Forum Specification (ATVEF).

Regarding Claim 8, Ullman in view of Boyer disclose a method as stated above in Claim 1. What is not disclosed, however, is that the content format is an ATVEF format. The Advanced Television Enhancement Forum Specification (ATVEF) outlines the implementation and use of the ATVEF format for distributing video content in conjunction with other multimedia-rich hypertext data. The ATVEF Specification is evidence that ordinary workers in the art would recognize the benefit of utilizing the ATVEF format to transport and display real-time video content in conjunction with other hypertext multimedia. Therefore, it would have been obvious to ordinary workers in the art to combine the user interactive video transmission and receiving system of Ullman in view of Boyer with the ATVEF format of the ATVEF Specification in order to facilitate transporting and embedding video within a hypertext linked multimedia display and vice versa to insure compatibility with a wide range of devices using a well known standard (ATVEF).

Conclusion

- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. U.S. Patent No. 6,675,385 to Wang discloses a digital TV with set top box for displaying an EPG as a plurality of HTML pages in a web browser wherein web pages from the internet are transported via the cable television network in MPEG2 streams.

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b. U.S. Patent No. 5,999,970 to Krisbergh et al. discloses a television system where terminals receive a scheduled advertisement that includes a URL.

c. U.S. Patent No. 6,415,438 to Blackketter et al. discloses a television

trigger with a time attribute indicating a future time to execute the trigger which is

a URL pointing to an Internet resource.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Matthew R Demicco whose telephone number is (703)

305-8155. The examiner can normally be reached on Mon-Fri, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chris Grant can be reached on (703) 305-4755. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

mrd Wbt)

January 26, 2005

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